WHAT IS CLAIMED IS:

1. A control system for detecting nozzle wear in an industrial shower header including a plurality of liquid spray nozzles for orienting liquid at a predetermined pressure and droplet size comprising:

means for determining a calculated flow rate for the plurality of liquid spray nozzles at a given operating pressure;

means for continuously monitoring an actual flow rate of liquid through the nozzle header;

means for comparing the desired flow rate with the actual flow rate and creating a feedback signal when a threshold is exceeded; and

means for providing the feedback signal to the spray system to adjust an operating condition thereof.

2. The system of claim 1 wherein the feedback signal is operative to initiate a cleaning cycle or alarm warning.

3. The system of claim 1 wherein the means for determining includes a look-up table with entries for liquid flow rate at various discrete operating pressures of the nozzles.

4. The system of claim 3 wherein the means for determining includes means for interpolating between the discrete operating pressures for providing an operating pressure for the nozzles.

5. A method for monitoring the performance of a spray nozzle in an industrial spraying system including the steps of control system for controlling the pressure of liquid applied to a nozzle comprising:

calculating a liquid flow rate value for a nozzle header at a desired pressure to derive a calculated liquid flow rate value;

measuring an actual flow rate of liquid applied at the desired pressure through the nozzle header to derive an actual flow rate value;

comparing the actual flow value with the calculated flow rate value;

determining whether the actual flow exceeds a percentage error deviation from the measured flow rate value; and

providing an output signal when the percentage error exceeds a certain value.

6. A spray controller for providing a signal indicative of nozzle performance detection in an industrial shower header including one or more liquid spray nozzles for orienting liquid spray at a certain operating pressure and droplet size comprising:

means for determining a calculated flow rate for the one or more liquid spray nozzles at a given operating pressure;

means for continuously monitoring an actual flow rate of liquid through the nozzle header;

means for comparing the desired flow rate with the actual flow rate and creating a feedback signal when a threshold is exceeded; and

means for providing the feedback signal to the spray system to adjust an operating condition thereof.